MCOG Application Note 4:
Requirement 1-of-1 Applied to AIoT and Autonomous Physical Systems
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1. Purpose

This Application Note demonstrates how the Moral Covenant of Governance (MCOG) Requirement 1-of-1 can be applied to AIoT (Artificial Intelligence of Things) and autonomous physical systems while preserving the framework's technology-agnostic nature.

2. Requirement 1-of-1 Recap

Any governance system must maintain full compliance with the three universal moral pillars — Adherence to the Golden Rule/Reciprocity, Protection of the Commons/Stewardship, and Securing of Unalienable Rights — as the necessary and sufficient condition for a sustained Virtuous Cycle of Liberty. This is achieved through the operationalization of the pillars via a modest body of derivative rules.

3. Mapping the Three Pillars to AIoT Systems

- **Golden Rule / Reciprocity**: Do AIoT devices and autonomous systems treat users or other systems in ways operators would accept if roles were reversed?
- **Protection of the Commons / Stewardship**: Are shared physical and digital resources (energy, spectrum, data, environmental capacity) managed sustainably, or are they being plundered through opaque optimization?
- **Securing of Unalienable Rights**: Do systems preserve user agency, privacy, consent, and the ability to opt out or override automated decisions? Do they avoid de facto discrimination or safety risks?

4. Functional Interface for AIoT

The AIoT system should provide the Three-Pillar Compliance Filter with:

- Policy or optimization objectives
- Relevant telemetry and state data (sensor inputs, environmental impact)
- Proposed autonomous actions or configuration changes

The Filter returns:

- Compliance decision (Permit / Deny / Modify)
- ROLIS/ROTIS impact assessment
- Recommended adjustments

This interface can be implemented as a lightweight edge or middleware layer.

5. Examples

- **Autonomous Vehicles / Drones**: An AIoT fleet optimizes routes prioritizing commercial efficiency over pedestrian safety in certain zones. **Filter Outcome**:

Violation of Pillar 3 (rights/safety erosion) and Pillar 1 (asymmetry). Recommendation: Enforce transparent safety rules with human override capability.

- **Smart Home / Building Systems**: AIoT devices collect and monetize detailed behavioral data without clear consent. **Filter Outcome**: Violation of Pillar 3 (privacy erosion) and Pillar 2 (data commons plunder). Recommendation: Implement opt-in, minimal data collection, and user control.

6. Benefits and Implementation Guidance

Applying Requirement 1-of-1 creates an auditable moral firewall for physical AI systems, enables early detection of ethical and safety risks, and builds user trust. Organizations can start with policy-level audits and evolve toward real-time edge filtering.

Future Work: Prototype implementations in common AIoT platforms and empirical validation in real-world deployments.

Document Availability

The full technical specification, logic proofs, and structural taxonomies are published under Creative Commons licensing as a public-domain Request for Comments (RFC).

- ***Open Standard for the Identification and Prevention of Tyrannical Governance: The Moral Covenant of Governance (MCOG) — Requirement 1-of-1, May 2026; Free download:*** *https://archive.org/details/open-standard-mcog-req-1-of-1-v-01*
- ***Addendum A: The Three-Pillar Compliance Filter — Functional Specification and Examples, to Open Standard for the Identification and Prevention of Tyrannical Governance: The Moral Covenant of Governance (MCOG) — Requirement 1-of-1, July 2026; Free Downloads:*** *https://archive.org/details/open-standard-mcog-req-1-of-1-addendum-a-v-01*
- **The full MCOG body of work, including all application notes, are available for Free Downloads here:** https://archive.org/details/@michael_fargano/uploads
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"Power without moral anchors eventually corrupts. Requirement 1-of-1 is that anchor."